first segment sequence, each of said information stream
segments comprising a plurality of <u>image</u> [information]
frames;

a compression module, for compressing said <u>image</u>
[information] frames forming said information stream
segments, <u>where said compressing of said image frames</u>
<u>produces control information indicative of buffer behavior</u>;

a re-sequencing module, for re-arranging according to
a second segment sequence, said information stream segments
including said compressed <u>image</u> [information] frames, said
first segment sequence being related to said second segment
sequence by an index; and

an encryption module, for encrypting said re-sequenced
information stream segments and said index.

REMARKS

In the Office Action, the Examiner noted that claims
1-18 and 22-29 are rejected. By this amendment, claims 1,
7-9, 13-15, 23 and 24 are amended, and claims 2-6, 10-12,
16-18, 22 and 25-29 continue unamended.

The applicants' attorney thanks the Examiner for his
telephone interview of January 8, 2001 and his further
clarification of his position with respect to the claimed
invention. In response, a portion of the limitations of
claim 14 has been incorporated into claims 1, 23 and 24.

In view of both the amendments presented above and the
following discussion, the applicants submit that none of
the claims now pending in the application are obvious under
the provisions of 35 U.S.C. §103. Furthermore, the
applicants also submit that all of these claims now satisfy
the requirements of 35 U.S.C. §112. Thus, the applicants
believe that all of these claims are now in allowable form.

Rejection of Claim 13 Under 35 U.S.C. §112

The Examiner has rejected claim 13 (per comment 6 of the Office Action as being unpatentable under 35 U.S.C. §112, ¶1, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Claim 13 has been amended to remove language requiring antecedent basis in the claim. The applicants submit that claim 13, as it now stands, fully satisfies the requirements of 35 U.S.C. §112, ¶1.

Rejection of Claims 1-18 and 22-29 Under 35 U.S.C. §103

The Examiner has rejected claims 1-18 and 22-29 (per comments 6-13 of the Office Action) as being unpatentable over the Walker patent (United States Patent No. 5,014,310 issued May 7, 1991) in view of Inoue patent (United States Patent No. 5,195,134, issued March 16, 1993). The applicants respectfully traverse.

The Walker patent discloses a method and apparatus of rearranging adjacent lines of a baseband, NTSC, video signal such that chrominance and luminance features of the video signal are maintained. That is, the Walker patent addresses the problem of chrominance leakage of a 3.58 Mhz local color sub-carrier reference signal into the chrominance information of the video lines applied to a descrambled video line.

The Inoue patent discloses an apparatus for transmitting a scrambled video and audio signal via a satellite wherein the audio portion of the signal contains channel, start/end time and standard time information of programs. A video tape recorder can record programs based

on the information contained in the audio portion of the signal.

The Walker patent and Inoue patent, either singly or in combination, fail to disclose or suggest the invention of claim 1 as follows:

> "A method for securing an information stream comprising a sequence of image frames, said method comprising the steps of:
>
> segmenting said information stream into a plurality of information stream segments having a first segment sequence, each of said information stream segments comprising a plurality of image frames;
>
> compressing said image frames forming said information stream segments, where said step of compressing said image frames produces control information indicative of buffer behavior;
>
> re-sequencing said information stream segments to produce a re-sequenced information stream having a second segment sequence, said first segment sequence being related to said second segment sequence by an index; and
>
> encrypting said re-sequenced information stream and said index. "   (emphasis added).

In contrast to the above-quoted claim language, both the Walker and Inoue arrangements fail to disclose or even remotely suggest a process of "compressing said image frames forming said information stream segments". Rather, as referenced by the Examiner's comment number 7, the Walker arrangement discloses compressing and scrambling a digital audio signal. Specifically, Walker discloses, "The compressed and scrambled digital audio signal is further processed for error detection and correction" (column 7, lines 59-61). There is no disclosure or suggestion in Walker to "compress image frames". More specifically, the Walker arrangement rearranges video lines without the step of compressing the video lines.

Furthermore, the Inoue arrangement also does not disclose or suggest "compressing image frames". In contrast to applicants' invention, Inoue discloses, "The video signal which is transmitted from the video, audio, and digital audio signal transmission device to the scramblers is of NTSC format, and scrambled by line shuffling, using frame memory" (column 4 lines 7-11). The Inoue arrangement simply rearranges video lines without the step of compressing the video lines.

Additionally, it is noted that both the Walker arrangement and the Inoue arrangement make no mention of buffer behavior. Rather, the Walker and Inoue arrangements operate on "video lines" and not on an "information stream" as in the applicants' invention. Thus, buffer behavior is irrelevant to the prior art arrangements.

The Examiner argues in comment 12 that "buffer utilization" equates to "access rights" for decompression. The applicants disagree. The "buffer utilization level" feature of the invention is not equivalent to access rights for decompressing an information stream. Access rights allow the receiving end to decode and decompress a signal. By contrast, the "buffer utilization level" is determined by, for example, modeling, at an encoder, the behavior of a buffer at a decoder. This is entirely different from the prior art arrangements.

Since the references, either singly or in combination, fail to disclose or suggest the claimed invention, it is respectfully submitted that the invention of claim 1 is patentable over the cited references. Moreover, since independent claims 23 and 24 include limitations similar to those found in independent claim 1, it is submitted that claims 23 and 24 are patentable for at least the reasons

discussed above with respect to claim 1. Therefore, the applicants submit that claims 1, 23 and 24, as they now stand, fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder.

Dependent claims 2-18, 22 and 25-29 depend from claim 1 or 23 and recite additional features therefore. As such, and for the exact same reason set forth above, the applicants submit that none of these claims are obvious with respect to the teachings of the cited reference. Therefore, the applicants submit that all of these dependent claims also fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder.

CONCLUSION

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Eamon J. Wall, Esq. at 732-530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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